

# Hoppin' on the Elapsed Time Line

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**Reporting Category** Measurement

**Topic** Determining elapsed time

## Materials

- Elapsed Time Lines (attached)
- Elapsed Time Word Problems (attached)
- Elapsed Time Line Recording Sheet (attached)

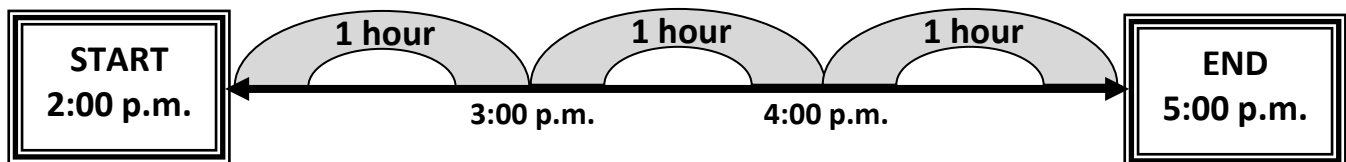
## Vocabulary

*half-hour, quarter hour, hours, minutes, hour hand, minute hand, analog clock, digital clock, a.m., p.m., elapsed time*

## Student/Teacher Actions (what students and teachers should be doing to facilitate learning)

1. Ask students what “happens to the time” from the moment they get to school until they leave for home. Describe “elapsed time” as an amount of time that passes between two given times. Using the Elapsed Time Lines and Elapsed Time Word Problems, demonstrate how students will use the time lines to determine elapsed time.
2. Explain that in order to determine elapsed time on the time line, students will write the start time and end time information that they read in the word problems, and then they will count the hours that elapse between the two times. Demonstrate to students how this can be recorded on an Elapsed Time Line in “hops,” or one-hour increments, by hopping forward from the start time hour by hour until they come to the end time. They need to record each hop, and then they will count the hops. Ask why they are counting in hours and not minutes. Model by solving the following problem:

**The movie starts at 2:00 p.m. and it ends at 5:00 p.m. What is the elapsed time between the start time and the end time of the movie? How long is the movie?**



## Assessment

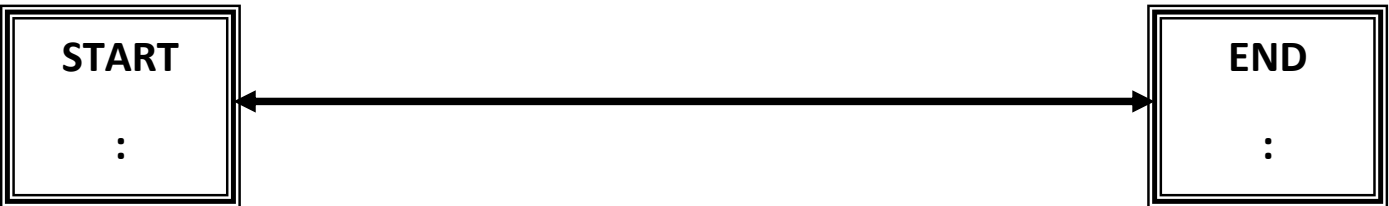
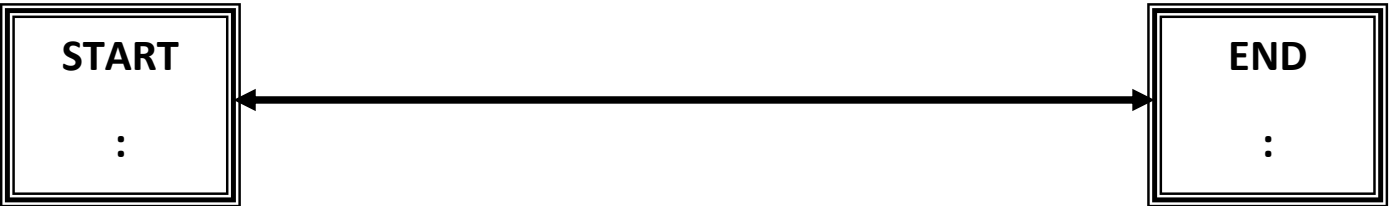
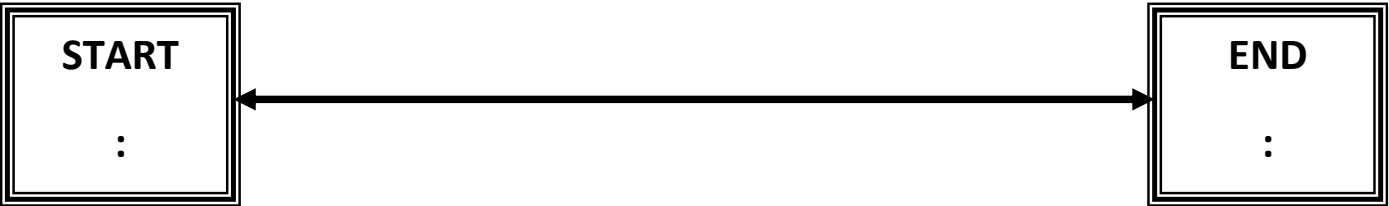
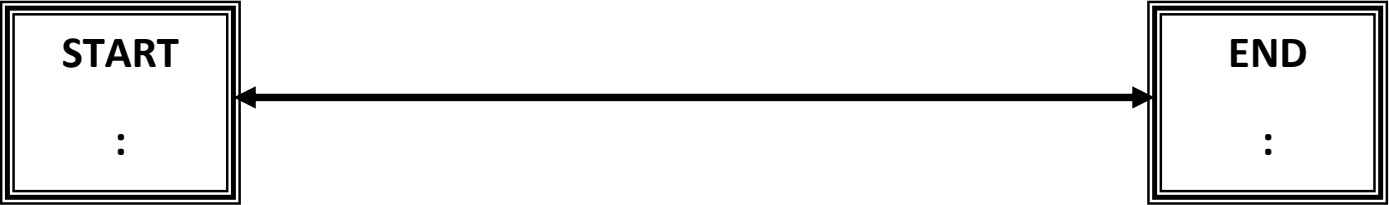
- **Questions**
  - If the start time is 8:00 a.m. and the end time is 11:00 a.m., what is the elapsed time?
  - How can you determine elapsed time in hours if the start time is 3:30 p.m. and the end time is 5:30 p.m.? Explain your reasoning by using the Elapsed Time Line.

- **Journal/Writing Prompts**

- You and a friend are going to the movies. The movie starts at 4:00 p.m. and ends at 7:00 p.m. Explain how you can find out how long the movie is.

# Elapsed Time Lines

Name: \_\_\_\_\_ Date: \_\_\_\_\_



# Elapsed Time Word Problems

## CARD 1

Sally went to her friend's house at 3:00 p.m. She left her friend's house at 5:00 p.m. How many hours did Sally stay at her friend's house?

## CARD 4

The math test started at 9:00 a.m. The math test ended at 10:00 a.m. How long was the math test?

## CARD 2

Rhonda's plane left Roanoke at 4:00 p.m. She arrived in New York City at 6:00 p.m. How long was her airplane flight?

## CARD 5

Make your own elapsed time word problem.

## CARD 3

Danny arrived at school at 8:00 a.m. He got sick and went home at 11:00 a.m. How long was Danny at school?

## CARD 6

Make your own elapsed time word problem.

# Elapsed Time Line Recording Sheet

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Elapsed Time Card # \_\_\_\_\_

A diagram illustrating a bidirectional relationship. It consists of two rectangular boxes, one on the left and one on the right. The left box is labeled "START" at the top and contains a colon ":" below it. The right box is labeled "END" at the top and contains a colon ":" below it. A long, horizontal double-headed arrow connects the two boxes, pointing from the left box to the right box and from the right box to the left box.

Elapsed Time Card # \_\_\_\_\_

A diagram illustrating a bidirectional relationship between two nodes. On the left is a box labeled "START" with a colon ":" below it. On the right is a box labeled "END" with a colon ":" below it. A horizontal double-headed arrow connects the two boxes, indicating a relationship that can be traversed in both directions.

Elapsed Time Card # \_\_\_\_\_

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